



# Projects and Lands Committee

Project Status Update  
September 8, 2010

*Matthew Morrison, Division Director, Project Coordination  
Everglades Restoration and Capital Projects*



# **Site 1 Impoundment - Fran Reich Preserve**

**Project Status Update  
September 8, 2010**

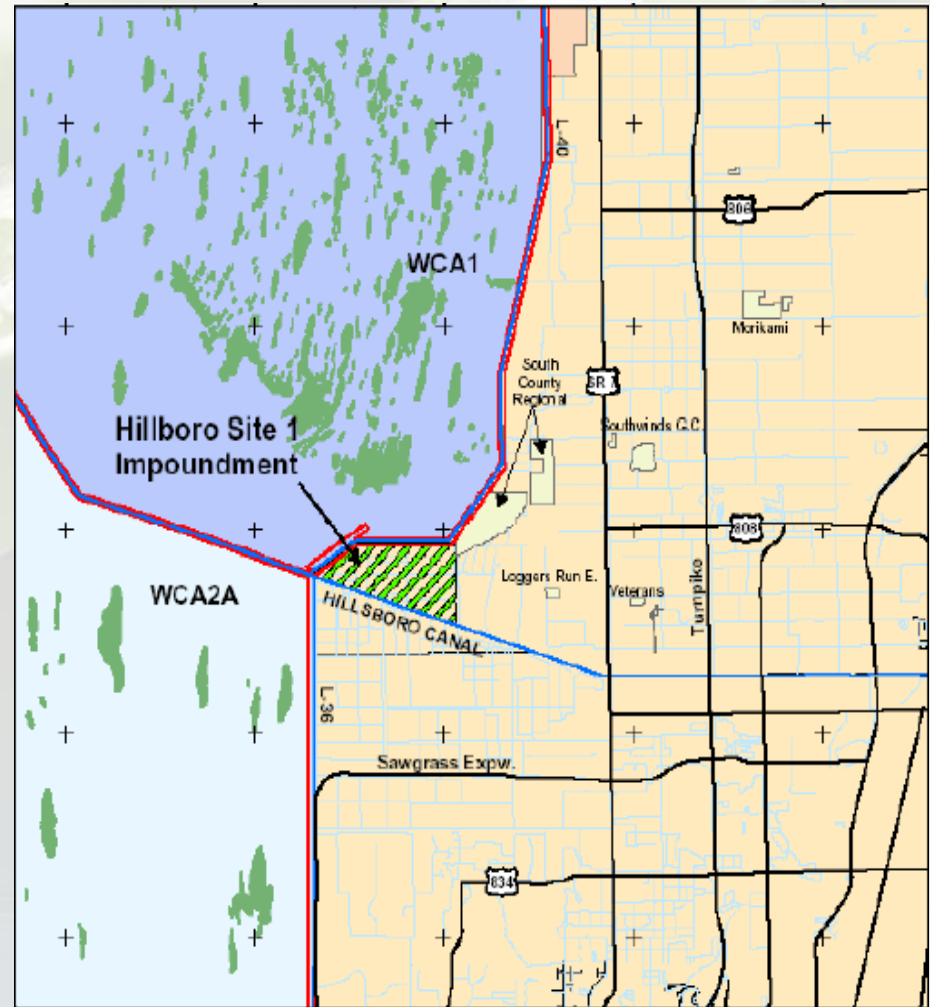
# Project Description

The Site 1 Impoundment / Fran Reich Preserve Project will capture and store excess surface water runoff from the Hillsboro watershed to reduce releases from the Arthur R. Marshall Loxahatchee National Wildlife Refuge and Lake Okeechobee for water supply.

The project includes:

- 1,660-acre aboveground reservoir
- 13,500 ac-ft of storage

The above features will be accomplished in two Phases - Contract 1 and Contract 2.





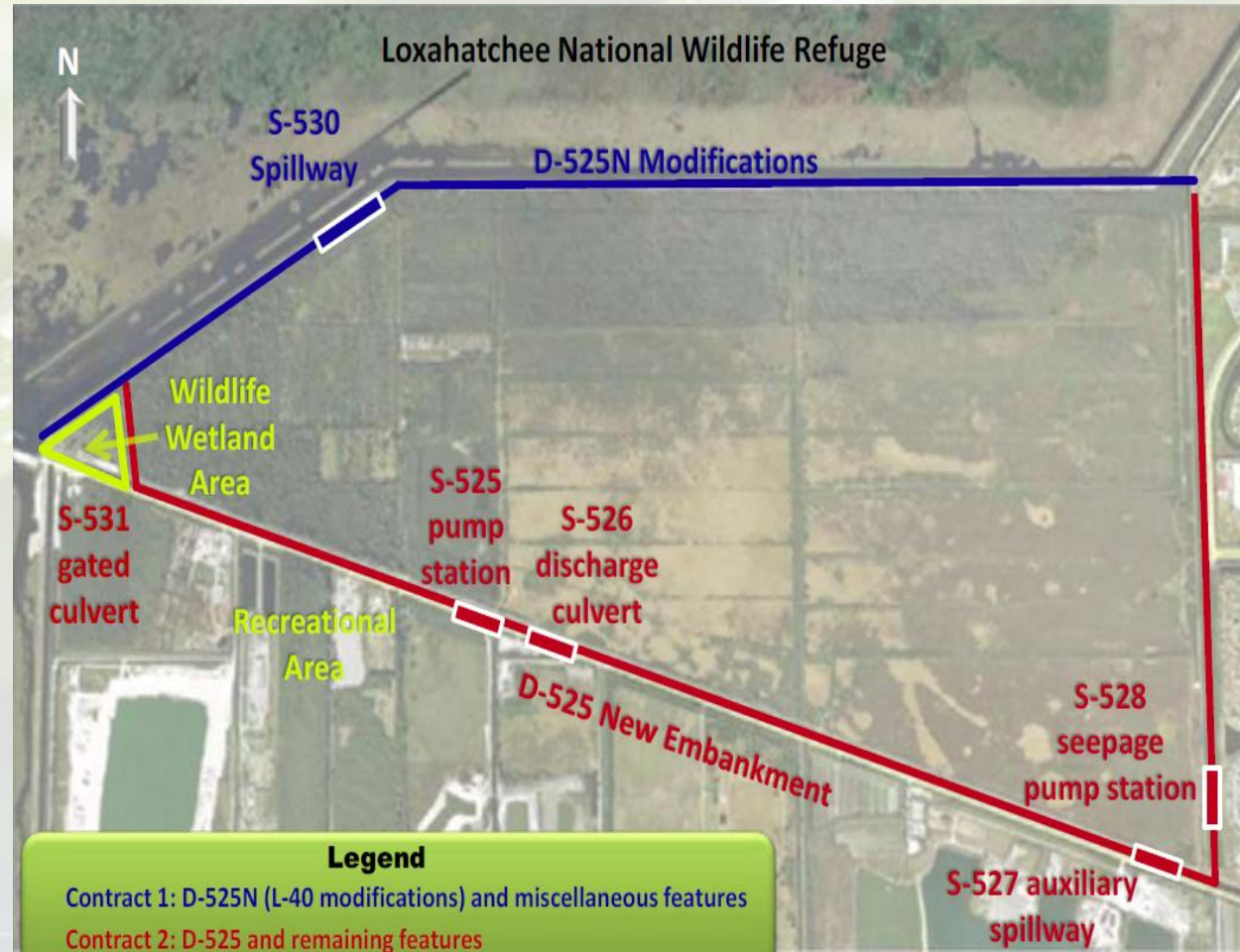
# Phased Construction Contracts

## Contract 1 (Phase 1) :

- L-40 Embankment Improvements
- Six-acre Wildlife Wetland Area
- S-530 Emergency Overflow
- Miscellaneous earthwork

## Contract 2 (Phase 2) :

- Construction of inflow and seepage pump stations
- Impoundment Structures
- Canal improvements
- D-525 embankment and instrumentation



# Project Status - Contract 1 & 2

## Contract 1

- Construction Contract Executed – August 2010
- Construction Start – September 2010
- Construction End – November 2012
- Cost ~ \$44M

## Contract 2

- Design complete - January 2011
- Contract 2 construction award – September 2011
- Anticipated Construction End Date – March 2014
- PIR authorized for ~ \$80M (Contracts 1 & 2)
- 902 limit is ~\$96M (20% above PIR)
- Recent Revised Cost Estimate for Both Contracts 1 and 2
  - ~\$143M which exceeds the 902 Limits
- New detailed cost estimate expected mid-September

**Groundbreaking  
for Site 1:  
Friday October 29,  
2010, 10:00 a.m.**



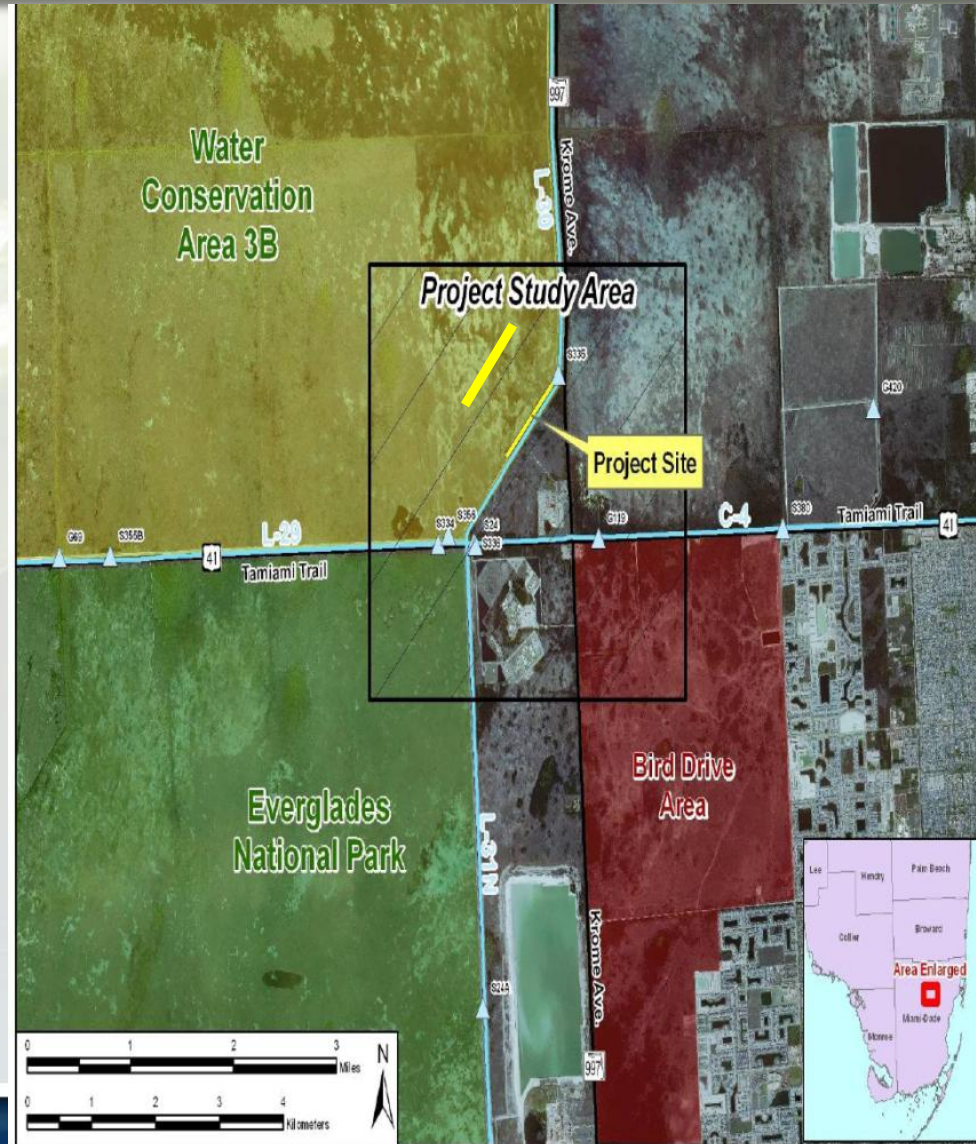


# **Levee 31N (L-31N) Seepage Management Pilot Project**

**Project Status Update  
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# Project Description

- Consists of 80' deep slurry wall with an integral window, extraction/injection wells and monitoring system
- Evaluate subsurface “barrier” technology to reduce seepage from Everglades National Park





# Project Budget

- Yellow Book (1999) \$10,000,000
- PPDR (2008) \$15,200,000
- PPA (“902 limit”) \$15,585,000
- Construction cost estimate \$ 7,828,000
- Project costs spent to date ~\$ 8,000,000
- Submitted bids are approximately twice the construction cost estimate





# Options Needing Further Evaluation

- Develop a “post-authorization change report” to increase the project budget
- Re-formulate the design and re-bid the pilot
- Delay the construction but continue monitoring
- Cancel the pilot project and initiate the PIR





# **Picayune Strand Restoration**

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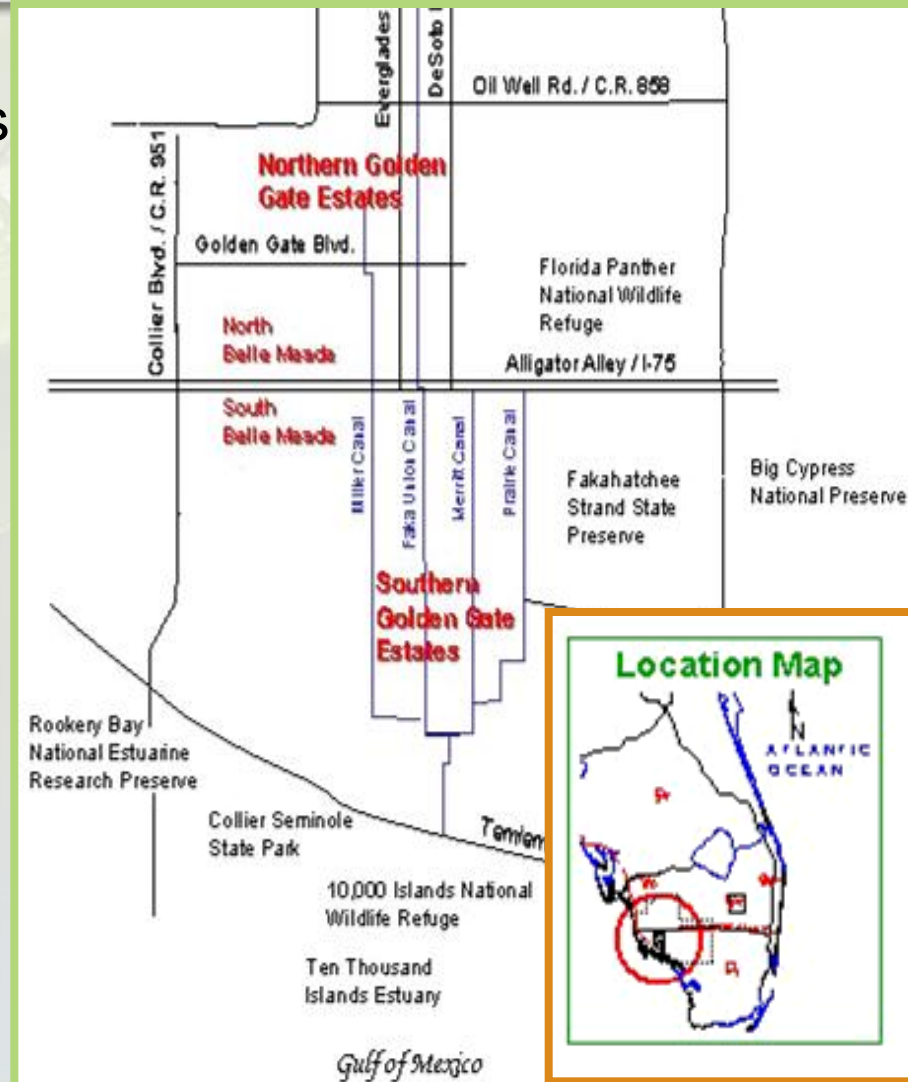


# Project Description

The Picayune Strand Restoration Project will restore over 55,000 acres of wetlands, which was formerly a privately-owned subdivision called Southern Golden Gate Estates.

Project features include:

- Three pump stations:
  - Merritt – 810 cfs
  - Faka Union – 2650 cfs
  - Miller – 1250 cfs
- Plugging 48 miles of canals
- Removing 227 miles of roads
- Protection features for adjacent lands



# Project Description (Cont.)

Project features will be accomplished in five phases:

- Phase 1 – Prairie Canal and Phase I Road Removal (complete)
- Phase 2 – Merritt Pump Station and Phase II Road Removal (under construction)
- Phase 3 – Faka Union Pump Station and Phase III Road Removal
- Phase 4 – Miller Pump Station and Phase IV Road Removal
- Phase 5 – Protection Features



# Prairie Canal and Phase I Road Removal – Construction Complete



- Seven miles of Prairie Canal filled
- 65 miles of roadway removed
- 17 culverts constructed to restore natural sheetflow
- More than 13,000 acres of restored and enhanced habitat





# Merritt Pump Station and Phase II Road Removal – Construction Started



- Merritt Canal Pump Station
- Merritt Canal and East/West Canal Plugging
- 70 miles of roadway to be removed
- ~14,000 acres of restored and enhanced habitat



# Project Status - Contract 1 & 2

**Project Lands** ~\$156M SFWMD; ~\$38M Federal Farm Bill

## **Phase 1 – Prairie Canal and Phase 1 Road Removal and Culverts under Tamiami Trail (Complete)**

- Construction Start – August 2006
- Construction End – September 2007
- Cost ~ \$14M (Pre-Partnership Credit Agreement, August 2009)

## **Phase 2 – Merritt Pump Station and Phase II Road Removal**

- Contract construction award – September 2009
- Anticipated Construction End Date – August 2012
- Cost ~ \$52M (initial contract); \$2M Change Controls

## **Phase 3 – Faka Union Pump Station and Phase III Road Removal**

- Contract construction award – November 2010
- Anticipated Construction End Date – July 2013
- Cost ~ \$109M

# Project Status - Contract 1 & 2 (Cont.)

## Phase 4 – Miller Pump Station and Phase IV Road Removal

- Construction Start – November 2012
- Construction End – September 2015
- Cost ~ \$48M

## Phase 5 – Protection Features

- Contract construction award – March 2012
- Anticipated Construction End Date – March 2013
- Cost ~ \$22M

**PIR authorized for ~ \$438M**

**Current project cost (actual and estimated) ~\$439M\***

**902 limit PPA ~ \$571M**

*\* subject to increase over time; will continue to monitor*

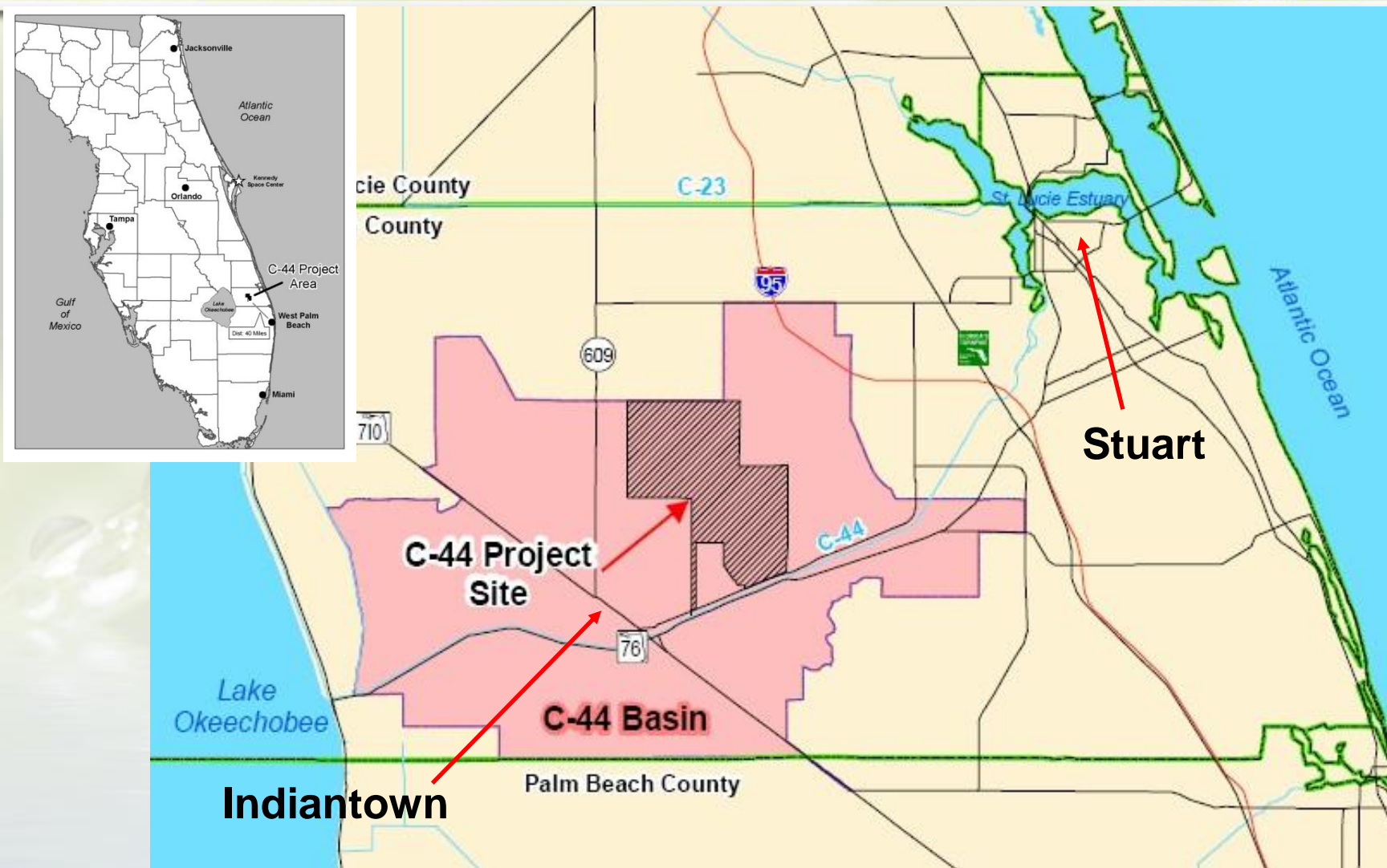




# **Indian River Lagoon – South; C-44 Reservoir/Stormwater Treatment Area (STA)**

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# C-44 Reservoir/STA Project





# C-44 Reservoir/STA Project Goals

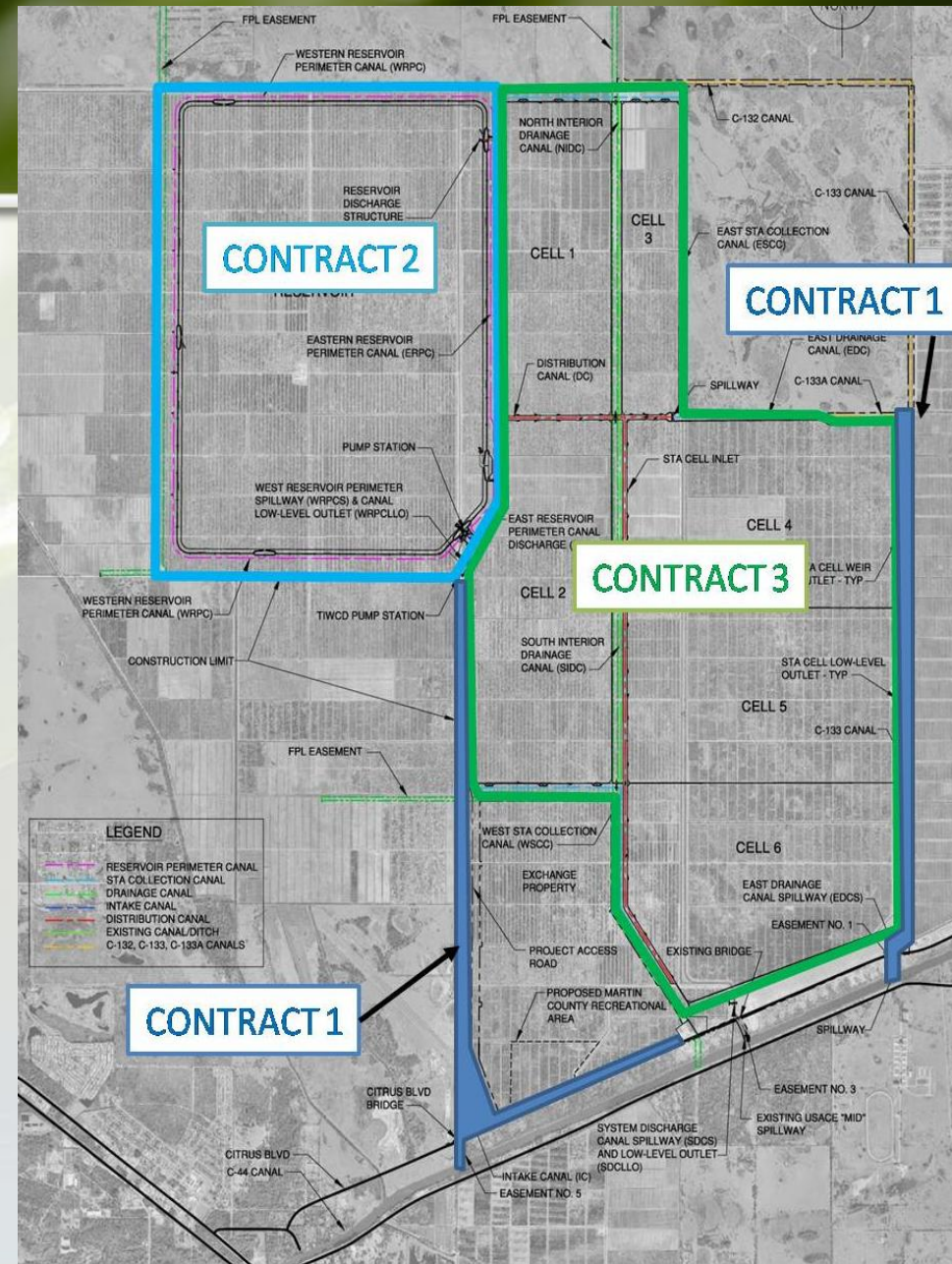
- Reduce C-44 Basin Runoff Peaks to the St. Lucie Estuary
- Reduce Nutrient Loads From C-44 Basin Runoff to the St. Lucie Estuary
- Implements Three (3) Components of the Indian River Lagoon-South (IRL-S) Project Implementation Report (PIR) Recommended Plan





# USACE Construction Current Status

- Contract 1 - Intake Canal, C-133A/C-133 Canals, Citrus Boulevard features
  - Repackaged design to be submitted November 2010
  - SFWMD provides upfront payment of ~\$2 million prior to solicitation by USACE for the construction of the Citrus Boulevard features
  - USACE construction start not anticipated prior to February 2011



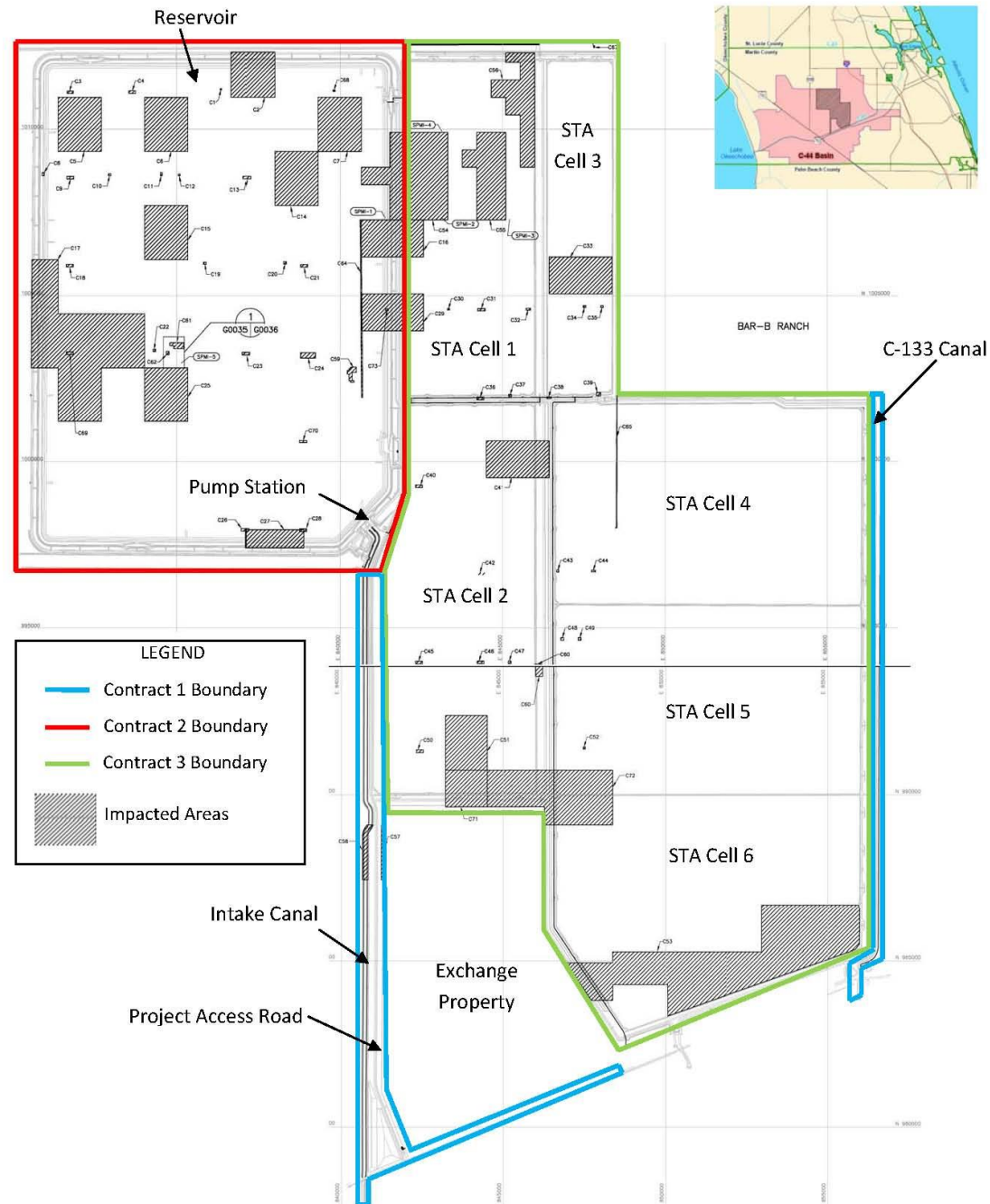


# IRL-S Project Partnership Agreement (PPA)

- PPA encompasses all reservoir and STA components of IRL-S
  - C-44 Reservoir/STA
  - C-23/C-24 North and South Reservoirs/STA
  - C-25 Reservoir/STA
- PPA approved at August Governing Board and to be executed pending resolution of two issues
  - Utilization of agrochemical impacted soils
  - Off-site wetlands impact

# C-44 Project Agrochemical Impacted Soils

- Entire site has residual agrochemicals
- Agrochemical impacted soils are soils with sufficient concentrations that when inundated, the impacted soils pose an ecological risk
  - No human health and safety risk
- FDEP and USFWS requires inundated impacted soils to be covered with minimum of 6 inches of non-impacted soils
- USACE and its contractor are not allowed to touch impacted soils per USACE





# Construction with Agrochemical Impacted Soils

- USACE has required SFWMD to perform all efforts involving impacted soils
- Anticipate utilization of USACE contractor under SFWMD contract
  - USACE will award a contract for construction
  - SFWMD will negotiate with USACE Contractor to handle agrochemical soils
  - Same contractor will perform all work under two contracts
- USACE has agreed that impacted agrochemical soils can be utilized in the construction of structural features such as embankments, levees, or berms

# Agrochemical Contracts

C-44 Project Feature	Total Impacted Soils Management Plan Cost	Cost Share	Not Cost Share
FY 11: Contract 1 – Intake Canal	\$ 210,000	\$ 200,000	\$ 10,000
FY 12: Contract 2 – Reservoir	\$ 9,100,000	\$ 7,500,000	\$ 1,600,000
FY 15: Contract 3 – STA	\$ 17,700,000	\$ 16,800,000	\$ 900,000
<b>TOTAL</b>	<b>\$ 27,010,000</b>	<b>\$ 24,500,000</b>	<b>\$ 2,510,000</b>

Plan to seek legislative action to provide USACE the required indemnification in order for USACE to construct with soils



# Off-Site Wetlands Impact

- Martin County Comp Plan requires no impact to wetlands unless part of CERP project
- SFWMD has issued a permit to the off-site wetlands land owner requiring protection of those wetlands
  - Permit states a construction of a cutoff wall by the C-44 project to mitigate impacts from the C-44 project
- FDEP would require monitoring of additional off-site wetlands after construction to determine if any additional impacts

# Off-Site Wetlands Impact Proposed Solution

- SFWMD acquires ~70 acres including the 22 acres of wetlands and surrounding uplands
- Land becomes part of the C-44 Project
- Complies with Martin County Comp Plan
- Land Owner would request SFWMD to modify permit since lands no longer in ownership
- USACE responsible for any monitoring or mitigation of wetland impacts outside of these 22 acres





**Questions?**